

REMARKS

Claims 1 through 3 and 5 through 8 are pending in this Application. Claims 1, 2 and 7 have been amended. Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclosure as, for example, the depicted embodiments and related discussion thereof in the written description of the specification. Applicants submit that the present Amendment does not generate any new matter issue. Entry of the present Amendment is respectfully solicited. It is believed that this response places this case in condition for allowance. Hence, prompt favorable reconsideration of this case is solicited.

Claims 1, 2, 4-5 and 7 were objected to because of alleged informalities. Applicant is not clear of the basis for this objection. In each of claims 1, 2, 5 and 7, the limitations are separated by semi-colons and not commas, as suggested by the Examiner. The Examiner is respectfully requested to clarify the objection.

Claims 1 through 9 were rejected under 35 U.S.C. § 102 for lack of novelty as evidenced by Horn et al. (U.S. Pat. App. Pub. No. 2002/0107968, hereinafter "Horn"). In the statement of the rejection the Examiner asserted that Horn discloses a transmission data generation method and equipment identically corresponding to those claimed. This rejection is traversed.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the possession of one having ordinary skill in the art. *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994). Moreover, in imposing the rejection under 35 U.S.C. § 102, the Examiner is required to

specifically identify wherein an applied reference is perceived to identically disclose each feature of a claimed invention. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). There are significant differences between the claimed method and equipment vis-à-vis the method and equipment of Horn, that remove the factual determination that Horn discloses a method and equipment identically corresponding to those claimed.

Independent claim 1, as amended, describes a transmission data generation method including a fixed block size setting step for setting the size of a fixed block based on the overhead. the method further includes a variable block setting step for calculating each time the size of a variable block which cannot be divided by the fixed block and the overhead of the variable block for each segment of the contents when the size of the segment is not an integer multiplication of the size of the fixed block.

Independent claim 2, as amended, describes a transmission data generation method, including the step of a fixed block size setting step for setting the size of a fixed block based on the overhead. A fixed block playout time calculation step for calculating the playout time of the fixed block based on the size of the fixed block. the method includes a variable block setting step for calculating each time the size or playout time of a variable block which cannot be divided by the fixed block and the overhead of the variable block for each segment of the contents when the size of the segment is not an integer multiplication of the size of the fixed block.

Independent claim 7, as amended, describes a transmission data generation equipment. The equipment includes time calculation means which sets the size of a fixed block based on the overhead, calculates the playout time of the fixed block based on the size of said fixed block,

calculates the playout time of a segment for each segment of the contents based on the playout time of said fixed block, and calculates the transmission time of a segment based on the calculated playout time of the segment. When the size of a segment is an integer multiplication of the size of the fixed block, the time calculation means calculates each time the overhead for each segment based on the overhead in the fixed block. When the size of a segment is not an integer multiplication of the size of the fixed block, the time calculation means determines the playout time of an variable block which cannot be divided by the fixed block and the overhead in the variable block, and calculates each time the overhead for each segment based on the overhead in the fixed block and the overhead in the variable block of the segment.

With the present invention, the size of the segment may be an integer multiplication of the size of the fixed block, or may not be an integer multiplication thereof. When the size of the segment is an integer multiplication of the size of the fixed block, the segment consists of a plurality of fixed blocks, and the smallest overhead for the segment consists of the overhead of the fixed block. When the size of the segment is not an integer multiplication, the segment consists of a plurality of fixed blocks and one remaining block, and the smallest overhead for the segment consists of the overhead of the fixed block and the overhead of the remaining block (the variable block).

Conventionally, when fixed blocks and a variable block coexisted, there was no practical method to calculate the most suitable overhead. The present inventor discovered a method to calculate the most suitable overhead using a predetermined numerical analysis method. As a result, when the fixed blocks and the variable block coexisted, it is possible to determine the most suitable overhead each time.

In the present invention, when the size of the segment is not an integer multiplication of the size of the fixed block, the overhead of the variable block is calculated each time. Thus, in the present invention, for each segment, the overhead of the variable block is set to an optimum value according to the size of the variable block each time. Moreover, in the present invention, when the size of the segment is not an integer multiplication of the size of the fixed block, the overhead for each segment is calculated each time. Thus, in the present invention, for each segment, the overhead of the segment is set to an optimum value according to the size of the segment each time.

The cited Horn reference discloses that when the size of the segment is not an integer multiplication of the size of the fixed block, the overhead of the variable block is different from the overhead of the fixed block and is a value larger than the overhead of the fixed block. In the reference, the overhead of the variable block is set to a safe value (the largest value of the fluctuation range of the overhead). When the size of the segment is not an integer multiplication of the size of the fixed block, the overhead is set to the same value (the safe value) each time. Therefore, the reference does not disclose or remotely suggest a means to calculate the most suitable overhead, much less recognize the importance of optimizing the overhead of the variable block.

In Horn, " $e/(1-L)$ " is the overhead, and " e " is a fixed value. For example, if " L " is 20% and " e " is 100%, the number of distributed packets is " $1/(1-0.8)=1.25$ " times of the original number of packets. To cope with a change of the overhead due to a variable block, Horn sets " e " to a safe value (the largest value of the fluctuation range of the overhead). Therefore, in Horn, the overhead is set the same value (the safe value) for all segments. For example, the overhead takes a value of 104%-105% depending on the data size. When the size of the segment is an

integer multiplication of the size of the fixed block, "e" is 105%, and when the size of the segment is not an integer multiplication of the size of the fixed block, "e" is 105%. Therefore, in Horn, extra data are transmitted, and the redundancy is set at an overly large value.

If "L" is 0%, the overhead "e" of the present invention appears to agree with the overhead " $e/(1-L)$ " of Horn. However, the invention of Horn assumes that "L" will never be 0%. Moreover, the invention of Horn does not provide a method to minimize "e" depending on changes in the data size.

The above argued apparent differences between the claimed method and equipment vis-à-vis those of Horn undermine the factual determination that Horn discloses a transmission data generation method and transmission data generation equipment identically corresponding to those claimed. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicant, therefore, submits that the imposed rejection under 35 U.S.C. § 102 for lack of novelty as evidenced by Horn is not factually viable and, hence, solicits withdrawal thereof.

It is believed that all pending claims are now in condition for allowance. Applicants therefore respectfully request an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicants' representative at the telephone number shown below.


To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

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including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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